Materion Advanced Materials Group is an industry leader in providing durable and best-cost solutions for ceramic packages and hermetic cover/lids for the microelectronics industry. We offer a comprehensive portfolio of packaging materials in precious or non-precious material and can customize innovative electronic package materials to satisfy your unique needs. Our high-reliability packaging also supports most configurations, applications and volume requirements.

<table>
<thead>
<tr>
<th>Packaging Products</th>
<th>Applications</th>
<th>Illustrations</th>
<th>Lid Material</th>
<th>Preform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combo-Lids™ (Flat)</td>
<td>High reliability hermetic packaging</td>
<td></td>
<td>Kovar or Alloy 42</td>
<td>Gold-Tin or other alloys</td>
</tr>
<tr>
<td>Combo-Lids™ (Drawn)</td>
<td>High reliability hermetic packaging where die height is higher than package cavity depth</td>
<td></td>
<td>Kovar or Alloy 42</td>
<td>Gold-Tin or other alloys</td>
</tr>
<tr>
<td>Non-magnetic Metal</td>
<td>Medical Imaging and signal noise control</td>
<td></td>
<td>Mo, CuW, Bronze, Cu</td>
<td>Gold-Tin or other alloys</td>
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<tr>
<td>Non-magnetic BeCu</td>
<td>High Purity non-magnetic combo lids, does not contain Nickel or plating</td>
<td></td>
<td>BeCu</td>
<td>Gold-Tin or other alloys</td>
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<tr>
<td>Nozzle Combo-Lids™</td>
<td>MEMS, Automotive and High reliability hermetic package sealing</td>
<td></td>
<td>Kovar</td>
<td>Gold-Tin</td>
</tr>
<tr>
<td>Ceramic Combo-Lids™</td>
<td>Non-magnetic applications</td>
<td></td>
<td>Al₂O₃</td>
<td>Gold-Tin or other alloys</td>
</tr>
<tr>
<td>Tack welding services</td>
<td>Non-magnetic applications</td>
<td></td>
<td>Al₂O₃</td>
<td>Gold-Tin or other alloys</td>
</tr>
<tr>
<td>Selectively plated</td>
<td>High reliability hermetic package sealing</td>
<td></td>
<td>Kovar or Al₂O₃</td>
<td>Gold-Tin or other alloys</td>
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<tr>
<td>Getter Tack welded</td>
<td>High reliability hermetic package sealing</td>
<td></td>
<td>Kovar</td>
<td>Gold-Tin or other alloys</td>
</tr>
<tr>
<td>Palladium Combo-Lids™</td>
<td>High reliability hermetic package sealing</td>
<td></td>
<td>Kovar with Palladium</td>
<td>Gold-Tin or other alloys</td>
</tr>
<tr>
<td>Seam Seal-Lids™</td>
<td>Hermetic package sealing without preform</td>
<td></td>
<td>Kovar</td>
<td>-</td>
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<tr>
<td>Special Shaped</td>
<td>High reliability hermetic package sealing</td>
<td></td>
<td>Kovar</td>
<td>Gold-Tin</td>
</tr>
<tr>
<td>Epo-Lids™</td>
<td>Ceramic Lid for non-hermetic packages including CuPacks™</td>
<td></td>
<td>Al₂O₃</td>
<td>MEG-150 or MEG-165 Epoxy</td>
</tr>
<tr>
<td>Ceramic Air Cavity</td>
<td>Wireless Applications - Si, GaAs and GaN RF power transistors</td>
<td></td>
<td>Alloy 42 plated with Ni, NiCo, Au</td>
<td>Alumina ring frames</td>
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<tr>
<td>Etch Lids for AR Coated Glass</td>
<td>Double preform attached lid for Visi-Lid™ application</td>
<td></td>
<td>Kovar</td>
<td>Gold-Tin or other alloys</td>
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</tbody>
</table>